Amendments to the Claims

Replace all prior versions and listings of claims in the application with the following list of claims.

Claim 1 (CURRENTLY AMENDED) An optical switch device comprising a plurality of optical elements mutually aligned along a common device optical axis, wherein the **plurality of optical elements [sequence]** comprises:

a multiple-fiber pigtail for coupling the device to multiple optical ports,

a collimating lens coupled to the pigtail such that optical signals associated with the multiple optical ports will all pass through the collimating lens,

a birefringent crystal,

a halfwave plate pair,

a switchable Faraday rotator,

an electromagnet for switching the switchable Faraday rotator,

a Wollaston prism, and

a mirror;

wherein the multiple optical ports comprise a first port and a second port,

wherein the switchable Faraday rotator selectively switches the device between a first state and a second state,

wherein the switchable Faraday rotator rotates the polarization of light passing through it by 90 degrees when the electromagnet is turned on, wherein the switchable Faraday rotator does not rotate the polarization of light passing through it when the electromagnet is turned off, and

wherein the first state couples light between the first port and the second port, and the second state does not couple light between the first port and the second port.

Claims 2–7 (CANCELLED)

Claim 8 (NEW) A method for optical switching comprising:

collimating an input optical beam delivered from an input port using a focusing lens to produce a collimated beam,

spatially separating the collimated beam into two component beams having orthogonal polarizations using a birefringent crystal,

passing the two component beams through separate halfwave plates to give the two component beams a common polarization state,

passing the two component beams through an electromagnetically switchable Faraday rotator having a first switched state and a second switched state, wherein the switchable Faraday rotator in the first switched state does not rotate the common polarization state of the two component beams, wherein the switchable Faraday rotator in the second switched state rotates the common polarization state of the two component beams by 90 degrees,

refracting the two component beams using a Wollaston prism, wherein the two component beams are refracted at a first angle when the switchable Faraday rotator is in the first switched state, and wherein the two component beams are refracted at a second angle distinct from the first angle when the switchable Faraday rotator is in the second switched state,

reflecting the two component beams from a mirror so that the two component beams pass back through the Wollaston prism, the switchable Faraday rotator, the separate halfwave plates, and birefringent crystal to produce a recombined beam, and

passing the recombined beam through the focusing lens, and

coupling the recombined beam into a first output port when the switchable Faraday rotator is in the first state and into a second output port when the switchable Faraday rotator is in the second state.